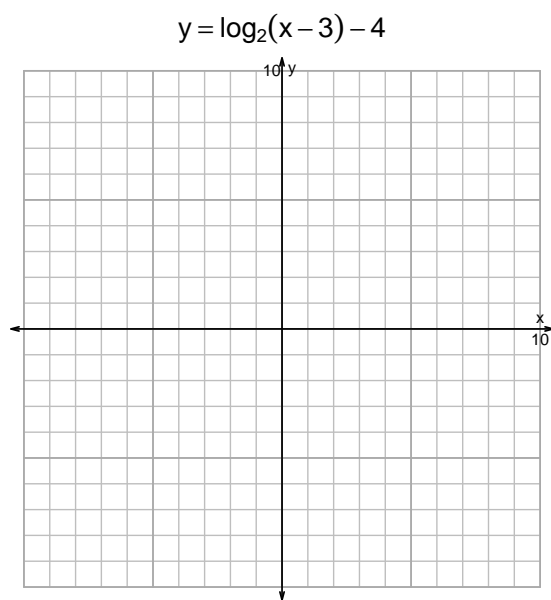
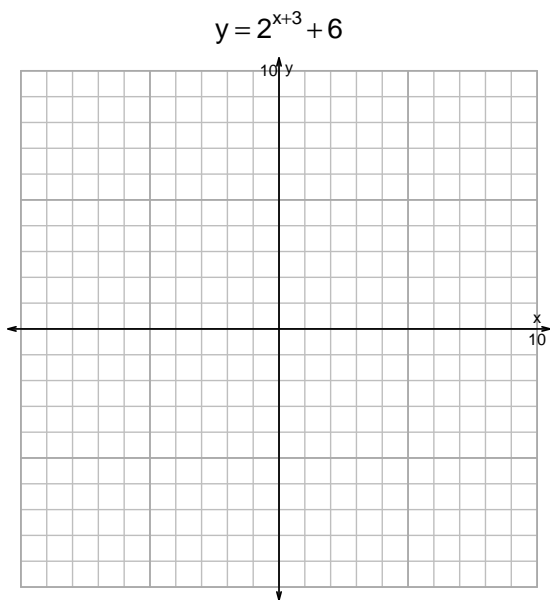


Name: \_\_\_\_\_

Date: \_\_\_\_\_

s18QUIZ: EXP LOG (QUIZ v291)

1. Graph  $y = 2^{x+3} + 6$  and  $y = \log_2(x - 3) - 4$  on the grids below. Also, draw any asymptotes with dotted lines.



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-19 = \left(\frac{-5}{3}\right) \cdot 2^{-7t/4}$$

3. An exponential function  $f(x) = 7.21 \cdot e^{-1.78x}$  is graphed below on a semi-log plot.



- a. Using the plot above, evaluate  $f(-2.1)$ .

- b. Express  $f^{-1}(x)$ , the inverse of  $f$ .

- c. Using the plot above, evaluate  $f^{-1}(0.05)$ .